

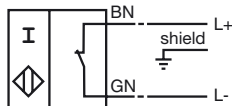


Model Number

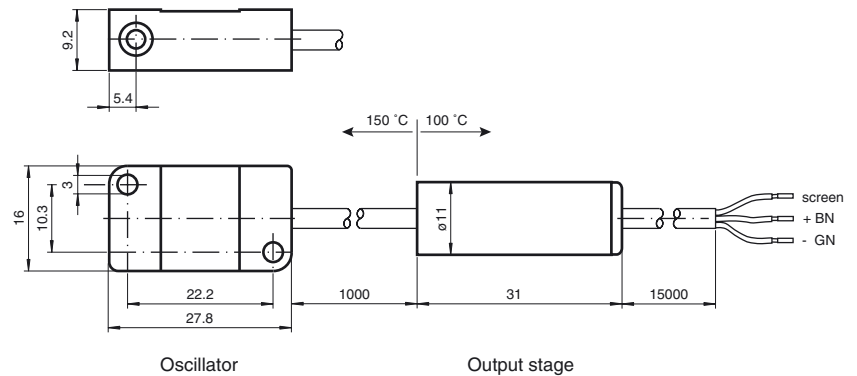
NJ1,5-V3-N-150-Y45879

Connection

N/NO



Dimensions



Technical Data

General specifications

Switching element function		NAMUR, NC
Rated operating distance	s_n	1.5 mm
Installation		embeddable
Output polarity		NAMUR
Assured operating distance	s_a	0 ... 1.22 mm
Reduction factor r_{AI}		0.25
Reduction factor r_{Cu}		0.2
Reduction factor r_{303}		0.7

Nominal ratings

Nominal voltage	U_o	8 V
Switching frequency	f	0 ... 1000 Hz
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA

Standard conformity

EMC in accordance with	IEC / EN 60947-5-2:2004
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Ambient conditions

Ambient temperature	0 ... 150 °C (32 ... 302 °F), Output stage 100 °C (212 °F)
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Mechanical specifications

Connection type	FEP cable, screened, 15 m
Core cross-section	3 x 0.38 mm ²
Housing material	Ryton R4
Protection degree	IP67

General information

Use in the hazardous area	see instruction manuals
Category	3G

ATEX 3G (nL)

Instruction

Device category 3G (nL)

Directive conformity

Standard conformity

CE symbol

Ex-identification

Effective internal capacitance C_i Effective internal inductance L_i

General

Installation, Commissioning

Maintenance

Special conditionsMaximum permissible ambient temperature T_{Umax} at $U_i = 20$ Vfor $P_i=34$ mW, $I_i=25$ mA, T4-T1for $P_i=34$ mW, $I_i=25$ mA, T4for $P_i=34$ mW, $I_i=25$ mA, T3for $P_i=34$ mW, $I_i=25$ mA, T2-T1for $P_i=64$ mW, $I_i=25$ mA, T4-T1for $P_i=64$ mW, $I_i=25$ mA, T4for $P_i=64$ mW, $I_i=25$ mA, T3for $P_i=64$ mW, $I_i=25$ mA, T2-T1for $P_i=169$ mW, $I_i=52$ mA, T4-T1for $P_i=169$ mW, $I_i=52$ mA, T4for $P_i=169$ mW, $I_i=52$ mA, T3for $P_i=169$ mW, $I_i=52$ mA, T2-T1for $P_i=242$ mW, $I_i=76$ mA, T4-T1for $P_i=242$ mW, $I_i=76$ mA, T4for $P_i=242$ mW, $I_i=76$ mA, T3for $P_i=242$ mW, $I_i=76$ mA, T2-T1

Protection from mechanical danger

Connection parts

Manual electrical apparatus for hazardous areas


for use in hazardous areas with gas, vapour and mist

94/9/EG

EN 60079-15:2003 Ignition protection category "n"

Use is restricted to the following stated conditions

CE

 II 3G EEx nL IIC T4 X The Ex-significant identification is on the enclosed adhesive label

≤ 80 nF ; a cable length of 10 m is considered.

≤ 50 μ H ; a cable length of 10 m is considered.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The data stated in the data sheet are restricted by this operating instruction! The special conditions must be observed! Directive 94/9/EG is generally applicable only to the use of electrical apparatus operating at atmospheric conditions.

If the equipment is not used under atmospheric conditions, a reduction of the permissible minimum ignition energies may have to be taken into consideration.

Laws and/or regulations and standards governing the use or intended usage goal must be observed. The sensor must only be operated with energy-limited circuits, which satisfy the requirements of IEC 60079-15. The explosion group depends on the connected and energy-limited supply circuit.

The adhesive label provided must be affixed in the immediate vicinity of the sensor!

The surface to which the label is applied must be clean, flat and free from grease!

The affixed adhesive label must be readable and durable, taking account of the possibility of chemical corrosion!

No changes can be made to apparatus, which are operated in hazardous areas.

Repairs to these apparatus are not possible.

Caution: Note that there are different maximum permissible ambient temperatures depending on the temperature classification for the oscillator and output stage !!!

100 °C (212 °F) ; only output stage

123 °C (253.4 °F) ; only oscillator

150 °C (302 °F) ; only oscillator

150 °C (302 °F) ; only oscillator

100 °C (212 °F) ; only output stage

116 °C (240.8 °F) ; only oscillator

150 °C (302 °F) ; only oscillator

150 °C (302 °F) ; only oscillator

89 °C (192.2 °F) ; only output stage

95 °C (203 °F) ; only oscillator

150 °C (302 °F) ; only oscillator

150 °C (302 °F) ; only oscillator

74 °C (165.2 °F) ; only output stage

80 °C (176 °F) ; only oscillator

145 °C (293 °F) ; only oscillator

149 °C (300.2 °F) ; only oscillator

The sensor must not be mechanically damaged.

When used in the temperature range below -20 °C the sensor should be protected from knocks by the provision of an additional housing.

The connection parts are to be installed, such that a minimum protection class of IP20 is achieved, in accordance with IEC 60529.